were significantly lower following rapid smoking than after either self-paced or no smoking. Measures of subsequent smoking behavior (latency to first cigarette; number of cigarettes) did not differ across conditions. Thus, craving was reliably suppressed by aversive rapid smoking, but craving scores did not predict actual smoking behavior.

Supported by the US National Institute on Drug Abuse.

Do ex-smokers respond to nicotine like never-smokers or current smokers?

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Thirteen ex-smokers (ES), 15 current smokers (CS) and 11 never-smokers (NS), none of whom had a history of alcohol/drug dependence, received 0, 6 or 12 mg nicotine/day via gum in a randomized, double-blind, within-Ss design. Self-reports of mood and behavioral preference for nicotine were similar for ES and NS and indicated that nicotine was more aversive for ES and NS than for CS. Our earlier study found the response to nicotine differed in ES and NS but this probably was a false positive result because the study did not exclude ES with a past history of alcohol/drug dependence, which we now know influences the response to nicotine.

Supported by the US National Institute on Alcoholism and Alcohol Abuse, the US National Institute on Drug Abuse and Hoechst Marion Rouseau.

Effects of three doses of transdermal nicotine on post-cessation eating, hunger and weight

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Sixty-six Ss in a randomized, double-blind trial of 7, 14 and 21 mg nicotine patches (*Journal of the American Medical Association*, 266, 3133, 1991) who were abstinent for the first 6 weeks completed serial food frequency forms. Cessation increased and nicotine patch decreased (in a dose-related manner) caloric, carbohydrate, fat and sweet intake and weight. Neither cessation nor nicotine patches influenced the preference towards sweets. A quantitative review of the results of 12 other studies plus our results suggests, contrary to current opinion, that transdermal nicotine suppresses weight gain.

Supported by Hoechst Marion Rouseau and the US National Institute on Drug Abuse.

An approach to measuring concentrations of solanesol and its metabolites in biologic fluids: a biomarker for cigarette "tar" exposure

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There is a need for biomarkers to determine human exposure to the particulate phase ("tar") of tobacco smoke. The trisesquiterpene alcohol solanesol is present in high concentrations (2–3% by weight) solely in the particulate phase. Using model compounds, methodology for converting solanesol and its likely metabolites to a single derivative, solanesane has been developed. Concentrations of solanesane would be a measure of solanesol absorption, and would be expected to be highly correlated with "tar" exposure. Preliminary results on applying the method to biologic fluids are described.

Supported by the Cigarette and Tobacco Surtax Fund of the State of California and by a Li Foundation Fellowship (PX).

Advertising fails to inform smokers of official tar yields of cigarettes

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To determine if smokers know the tar yields of their cigarettes and where to find tar yield information, telephone surveys were done with national probability samples of ultra-light ($n = 218$), light ($n = 360$) and regular ($n = 210$) smokers. Only 13% of ultra-light, 2% of light and 1% of regular smokers knew the correct tar yield of their brand, and 3%, 8% and 6%, respectively, reported that tar yields are found in advertise-

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Source: https://www.industrydocuments.ucsf.edu/docs/gncl0001

ments. Two-thirds of smokers not guessing a tar yield reported looking for tar yields on cigarette packages , where they are most often not found. The current American advertising-based system for tar yield notification is ineffective.

Supported by the Association of Teachers of Preventive Medicine and the Centers for Disease Control and Prevention.

Evidence for an opioid component in nicotine dependence

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We used the naloxone challenge test, commonly used to establish dependence on opiates, to evaluate the role of the endogenous opioids in nicotine dependence. Nine smokers and seven non-smokers participated in three laboratory sessions separated by at least 48 hours. Withdrawal symptoms (Clinical Institute Narcotic Assessment scale; CINA) and physiological parameters (pulse, blood pressure, skin temperature) were assessed for 1 hour following intravenous administration of either one of two doses of naloxone or saline. Smokers experienced greater dose-related increases in withdrawal and decreases in skin temperature following naloxone challenge compared with non-smokers. These results suggest opioid involvement in nicotine dependence.

Supported by grants from the US National Institute on Alcohol Abuse and Alcoholism and the National Institute on Drug Abuse.

Does smoking reduction influence cardiovascular risk factors?

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An open study (including 58 smokers) investigated the effects of an 8-week period of smoking reduction, before quit day, on cardiovascular risk factors including fibrinogen, PAI-1 activity, total LDL-and HDL cholesterol and postprandial triglycerides. The Nicotrol™ nicotine nasal spray was used as NRT. In 44 subjects a mean of 50% reduction of smoked cigarettes/day following 8 weeks was confirmed by significant decreases in expired CO, plasma cotinine and plasma thiocyanate levels. The reduction resulted in significant decreases in WBC, RBC, hemoglobin and several other risk factors. The study indicates that smoking fewer cigarettes per day offers health benefits for the smokers.

Supported by Pharmacia & Upjohn Consumer Healthcare.

Preventive oncology and nicotine addiction: results of a field study among lung cancer patients

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Representative data on the epidemiology of nicotine dependence for Austria show an average FTND score of 3.6 among smokers in the general population (using the Fagerström Test for Nicotine Dependence). Among 57 lung cancer patients (47 men, 10 women, mean age: 63 years, all smokers or ex-smokers) we found an average FTND score of 5.1. This indicates a much higher nicotine dependence in the lung cancer patients. Nicotine is addictive and plays an important role in maintaining tobacco consumption. If people highly addicted to nicotine are also experiencing a comparatively high tar exposure, then self-help alone is probably not sufficient to perform preventive oncolgy.

Subjective effects of caffeine during abstinence from smoking

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Fourteen smokers were tested in a within-subjects, 3 × 3 design comparing smoking status (smoking, 36 hours abstinence, 84 hours abstinence) and caffeine dose (0 mg, 200 mg, 400 mg). Dependent

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Source: https://www.industrydocuments.ucsf.edu/docs/gncl0001